OBJECTIVES: To evaluate the effectiveness of an antimicrobial stewardship programs. **METHODS:** The antimicrobial stewardship program was started since November 1, 2012, and pharmacists would intervene when antimicrobial agents, including levofloxacin, teicoplanin, meropenem, tigecycline and piperacillin/tazobactam, were used for more than 7 days. Inpatients who previously received any one of the 5 agents from 2011/11/1 to 2012/10/31 (phase 1) and from 2012/11/1 to 2013/10/31 (phase 2) were included. Patients' personal data, indication, residency, surgery history, duration of therapy, duration of hospital stay, quantity of antibiotics use and the cost of antibiotics were collected. The primary outcome was to compare the amount of antibiotics usage in defined daily doses (DDD per 1000 patient-days) between the 2 phases. Secondary outcomes were to compare the duration of therapy, the proportion of patients having prolonged antibiotic use over 14 days, the duration of hospital stay, expense of antibiotics, and readmission rate in 30 days. **RESULTS:** A total of 8,781 patients were included. 4,571 patients were in phase 1 and 4,210 were in phase 2. The most prevalent indications for antibiotic use were pneumonia and urine tract infection. The total quantity of antibiotics in phase 2 was significantly decreased from 224.08 DDD to 188.89 DDD as comparing with phase 1. The DDDs of each agent in phase 2 were also significantly decreased respectively. After the program implementation, the expense of antibiotics, duration of therapy, proportion of patients having prolonged antibiotic use over 14 days and duration of hospital stay were all significantly decreased. The readmission rate in 30 days did not differ between the two phases. **CONCLUSIONS:** The implementation of antimicrobial stewardship program was effective in reducing the amounts of antibiotics usage, and it may reduce the inappropriate use of antibiotics, shorten the duration of therapy and save medical expense without affecting quality of care in term of readmission rate.

PIN120

ARE ANTIBIOTIC POLICIES AND REIMBURSEMENT DECISIONS ALIGNED?

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OBJECTIVES: According to the World Health Organisation, the emergence of resistant organisms has rendered antibiotics ineffective in some settings (1). In an attempt to address current and future unmet needs in this area innovative antibiotics are being developed. We conducted a review of recent HTA evaluations for antibiotics to investigate whether policy initiatives to promote advances in antibiotics are reflected in reimbursement decisions. **METHODS:** The guidance directories of the Scottish Medicines Consortium (SMC), All Wales Medicines Strategy Group (AWMSG) and the National Institute for Health and Care Excellence (NICE) were reviewed for assessments of antibiotics, from 2000 until May 2014. Data relating to each assessment were extracted. A simple scoring system for the reimbursement decisions by the SMC and AWMSG was adopted: where a "positive" reimbursement decision scored 3, "Restricted use" scored 1, "Not yet reviewed" scored 0 and "Rejected" scored -1. Results were plotted to show the positioning of reimbursement decisions of AWMSG in relation to SMC. **RESULTS:** A total of 18 antibiotics were identified as having been assessed by either SMC or AWMSG. Of these 18 products, only 2 were assessed by NICE, and a further 2 were the subjects of "Evidence Review Summaries", product overviews that are not legally binding. Of the 18 antibiotics identified, only 3 and 2 received "Positive" reimbursement decisions by the SMC and AWMSG, respectively. Four antibiotics were "Not Recommended" by both SMC and AWMSG, of which several rejections were due to pharmaceutical companies not submitting dossiers to the regulatory body. Scatterplots of SMC and AWMSG scores featured six antibiotics in the top right quadrant. **CONCLUSIONS:** This study demonstrates the different assessment approaches by each regulatory body for antibiotics. Moreover, the low number of antibiotics reviewed highlights that the dearth of new, innovative antibiotics are not in keeping with policies to develop innovative antibiotics.

PIN121

ANALYSES ON TEMPORAL AND SPATIAL CLUSTERING AND CHANGING TREND OF HCV IN MAINLAND OF CHINA

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OBJECTIVES: Analyzing population distribution, temporal and spatial clustering, and changing trend of Hepatitis C Virus HCV in order to provide the evidence-based decision making for the control and prevention of HCV. **METHODS:** HCV cases were extracted from the National Diseases Reporting System of China CDC between 2008 and 2013. Spatial scanning unit was 2886 districts/counties in mainland China; temporal scanning unit was month, and time span was from Jan 2008 to Dec 2013. Kulldorff scan statistic was applied, and analyses were conducted by SaTScan™ 9.1. Making maps and visualizing results were carried out with ArcGIS 10.1. **RESULTS:** Monitoring data of HCV from 2008 to 2013 demonstrated that most cases of HCV occurred between 30 to 59 years old, above 60%; males were more than females, the ratio of males to females was 1.20-1.35; the percentage of peasants was nearly 60%. Results from SaTScan illustrated that the temporal and spatial clustering was existed for HCV; temporal dimension of HCV occurrence was from June to October of each year; spatial dimension was located in north-east area and north-west area. With respect to the changes of temporal and spatial clustering, class 1 clustering area was always located in the Middle of China. In 2011, it expended to the west half of China. Class 2 clustering area was stable and located in north-west of China, except for 2012. Class 3 clustering area was located in north-east of China, but it became smaller in 2013. Class 4 and 5 clustering area was located in south of China, and it became larger with time. **CONCLUSIONS:** Temporal and spatial clustering area of HCV was presented in this report, and its own changing pattern of clustering areas with years was noted. Findings from this paper will provide evidence-based decision making to prevent HCV infection, guide stockages and allocations of health resources, and to formulate HCV prevention and control strategies.

PIN122

CORRECTIVE ESTIMATION OF NEW CASES OF HEPATITIS C INFECTIONS IN CHINA BETWEEN 2005 AND 2013

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OBJECTIVES: Hepatitis C Virus (HCV) infection is a significant public health issue in China. In 2006, a national seroepidemiological survey of HCV showed 5.6 million people were tested with HCV positive. Although new cases with HCV infection are mandatory to report in China, it is believed that the reported information is under-reported. The objective of this study was to correctively estimate newly infected HCV cases by gender, age, and province in China from 2005 to 2013. **METHODS:** The Back-calculation method was used to estimate the initial number of HCV infection, based on annual HCV reported cases issued by China CDC and the incubation distribution of HCV, which was from an outbreak due to a medical accident at a county in Liaoning, China in 2012; then the Expectation Maximization (EM) algorithm was employed to obtain the optimization estimation of HCV infection. Prior to the estimation, a rate of 49.7% from Denniston's study, in which subjects were not aware that they were infected with HCV was considered in the calculation to control for the missing report. The Monte Carlo simulation was applied to calculate total numbers and their 95% CIs. **RESULTS:** The estimated numbers of newly-infected HCV cases from 2005 to 2013 were nearly 3.4 million. While 57.8% of the estimated newly-infected cases were male, cases of 30 to 39 years old were the group with the highest newly-infected cases of HCV (n=963, 304, 28.4%). The estimated newly-infected cases also showed geographic variations that north, southwest, and west were among the regions where higher numbers were found. **CONCLUSIONS:** This is the first time to correctively estimate newly-infected HCV cases using the annual infection disease report of China CDC; however, this estimation may still be underestimated because of the low unawareness of HCV and high rate of missing report on HCV cases in China.

PIN123

PEDIATRICIAN'S PERSPECTIVE ON PNEUMOCOCCAL CONJUGATE VACCINES IN INDIA: AN EXPLORATORY STUDY

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OBJECTIVES: - This paper focuses on this knowledge gaps for informed decision-making and identifies key barriers in uptake PCV in India. **METHODS:** - Qualitative interviews were conducted with pediatricians registered with Indian Academy of Pediatrics to generate evidence on perspective and practices regarding the PCV. A multi-level stratified sampling was applied to identify pediatricians across 12 metropolitan cities. The analysis was conducted using standard qualitative techniques to identify key domains, words, phrases and concepts from respondents. Quantitative variables are reported as mean and proportions. **RESULTS:** -Majority (67.7%) of pediatricians advice for PCV to all whereas 32.2% advice PCV only to those who can afford. Around half (50.8%) have no specific preference and recommend any PCV vaccine where as 28.0% recommend PCV13. Main reason for acceptance of PCV were educated and informed clients (50.8%) followed by pediatrician's advice and counseling (25.4%) whereas main reason for denial was price of vaccine (97.3). In addition, majority (74.1%) of pediatricians wanted PCV to be included into UIP whereas (17.7%) didn't and (8.0%) were not sure. **CONCLUSIONS:** - Pediatricians should put efforts to increase awareness about vaccine preventable disease among their clients and can facilitate bridge the knowledge action gap by helping their clients to make informed decision with regards to uptake of newer vaccines.

PIN124

THE STUDY ON THE PRESCRIBING PATTERN OF ACINETOBACTER INFECTION IN A TERTIARY CARE HOSPITAL

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OBJECTIVES: Acinetobacter genuses of bacteria have become a challenge for every hospital with regards to its treatment and cost of therapy due to its penchant to acquire resistance. The aim of the present study was to ascertain the prescribing pattern of antibiotics in Acinetobacter infection. **METHODS:** A cross sectional, observational, retrospective study was carried out, over a period of 6 months in a tertiary care hospital. The data collected was analysed to understand the pattern with respect to patient demographics, prescription patterns, co-morbidities as risk factors to infection, and resistance patterns. **RESULTS:** The study results showed that male patients had greater risk for *A. baumannii* infections with an age group of 41-60 years. The length of stay of a patient of *A. baumanni* infection was 23.51±27.97 days. The bacteria were found to be resistant to almost all categories of drugs. Based on the study of prescription of antibiotics it was found that empirical antibiotic therapy was prescribed to most patients. with the most prescribed drug being tigecycline and cefixime in 47 (97.9%) patients. The least prescribed antibiotic was Piperacillin – Tazobactam prescribed to 25 (42.9%) patients. Cefoperazone-sulbactam was found to have an antibiotic action against the bacterium. **CONCLUSIONS:** The study concluded that male patients were at a greater risk of *A. baumannii* infections. Length of stay of patients was on average 23.51±27.97 days. The study showed tigecycline and cefixime were the most prominently used antibiotic. The strain in this study was resistant to almost all cephalosporins except Cefoperazone-Sulbactam which had activity in 57.14% of the samples tested.